

ABB BALDOR RELIANCE III

Customer information packet

CDRX40144T

100HP, 1785RPM, 3PH, 60HZ, 405TC, TEFC, F1

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	TEFC
Frame	405TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	100.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	UL CSA CCSAUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Constant Torque Speed Range	6-60
Current @ Voltage	112.000 A @ 460.0 V 224.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	112.0 a
Insulation Class	F
Inverter Code	Inverter Ready

Part Detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG0692
Layout	617428-725
Eff. date	10-22-2021
CD Diagram	416820-002
Poles	04
Leads	3#2,6#4
Proprietary	False
Created date	05-22-2019

IP Rating	NONE
KVA Code	G
Max Speed	3600 rpm
Motor Lead Quantity/Wire Size	3 @ 2 AWG
Motor Standards	NEMA
Motor Type	A40064M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	38.22 IN
Power Factor	87
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Service Factor	1.00
Shaft Diameter	2.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1785 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat

Nameplate

NP2496L	
MOBIL POLYREX EM	

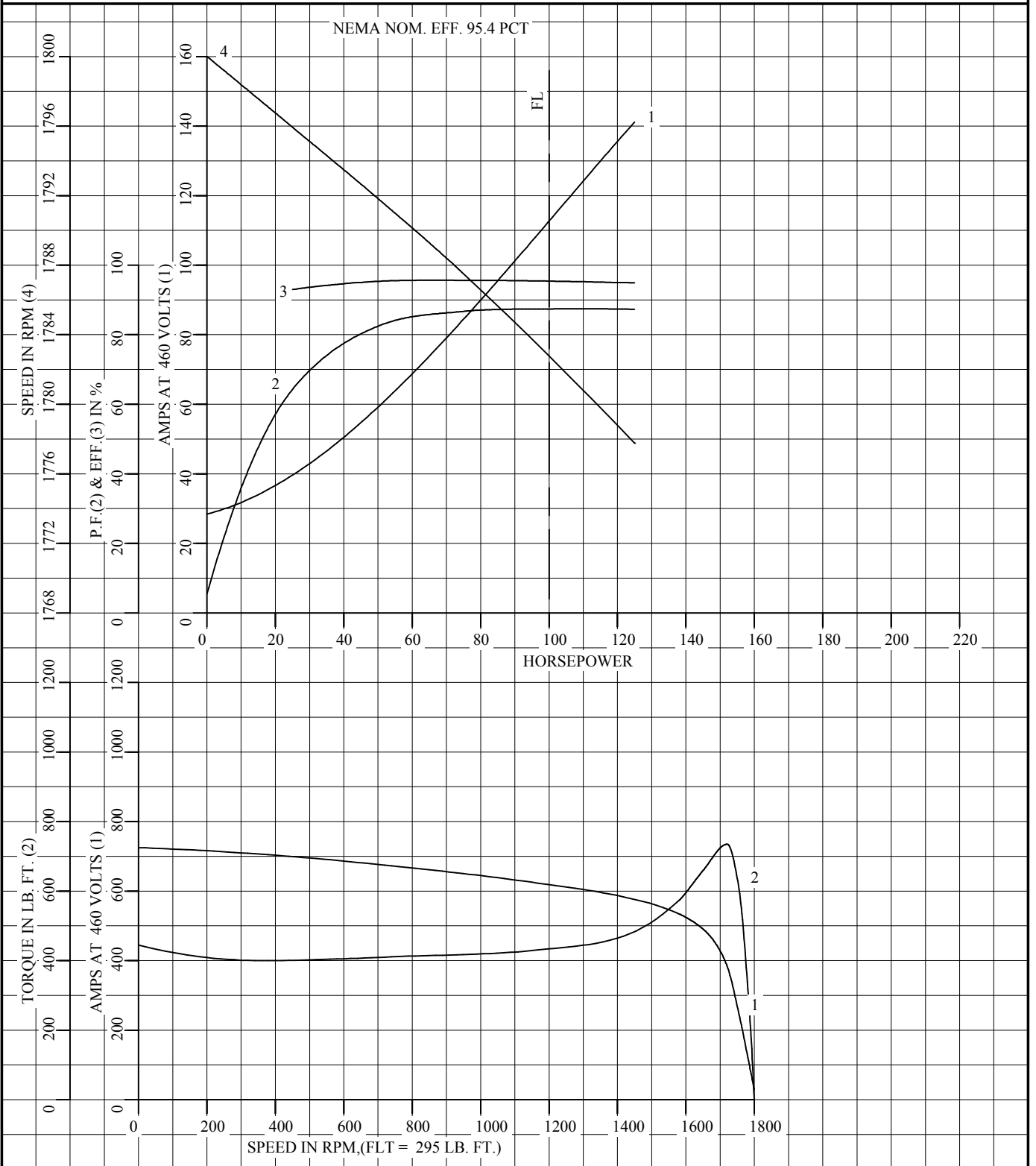
000613006PC		
CLASS I GROUP	C D X	NO.
CLASS II GROUP	X X X	
OPERATING TEMP CODE	T3C	

NP3140L

SPEC NO.	A40-7258-0692			CAT.NO.	CDRX40144T					FRAME	405TC
HP	100	VOLTS	230/460		PHASE	3	DESIGN	B	TYPE	P	
RPM	1785	AMPS	224/112		HZ	60	AMB	40	SF	1.00	
DRIVE END BEARING	80BC03J30X		DUTY	CONT	INSUL.CLASS			F			
OPP D.E. BEARING	80BC03J30X		ENCL	TEFC	CODE	G					
SF	1.15	WK2	26.346	MAG CUR	28.6		RPM MAX	3600			
CT HZ	6-60	VT HZ	0-60	CHP HZ	60-90		NEMA-NOM-EFF		95.4		
	SUIT FOR 55C AMB AT 1.00 SF					IP55					
SER.NO.				MOTOR WEIGHT		1467					

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	405HPZ	100	P	3/60	1785	230/460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
224/112	CONT	40/F	1.00	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
596956	418142-33RE	---	---	.0123/.0492		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	28.6	1800	5.49	0	
1/4	25.0	39.2	1796	64.3	93.0	
2/4	50.0	59.5	1792	82.5	95.4	
3/4	75.0	84.6	1788	86.7	95.7	
4/4	100	112	1783	87.4	95.4	
5/4	125	141	1778	87.3	94.9	
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES	
LOCKED ROTOR		0	151	445	725	
PULL UP		360	136	400	706	
BREAKDOWN		1721	250	735	382	
FULL LOAD		1783	100	295	112	
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE REMARKS: TYPICAL DATA NEMA NOM. EFF. 95.4 PCT						
		DR. BY	G. R. WEBB	A-C MOTOR PERFORMANCE DATA		
		CK. BY	W. L. SMITH			
		APP. BY	E. J. CHRISTIAN			
		DATE	09/29/15			
			A40WG0692-R016 ISSUE DATE 11/07/19			

REL S.O.	RPM 1785	S.F. 1.00	ROTOR 418142-33RE
FRAME 405HPZ	VOLTS 230/460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
HP 100	AMPS 224/112	CODE LETTER G	TEST DATE ---
TYPE P	DUTY CONT	ENCLOSURE TEFC	STATOR RES. @ 25 °C .0123/.0492
PHASE/HERTZ 3/60	AMB °C/INSUL 40/F	E/S 596956	OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

BALDOR
A MEMBER OF THE ABB GROUP

DR. BY G. R. WEBB
CK. BY W. L. SMITH
APP. BY E.J. CHRISTIAN
DATE 09/29/15

**A-C MOTOR
PERFORMANCE
CURVES**

A40WG0692-R016

ISSUE DATE 11/07/19

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REL. S.O.

 RPM **1785**

 S.F. **1.00**

 ROTOR **418142-33RE**

 FRAME **405HPZ**

 VOLTS **230/460**

 NEMA DESIGN **B**

 TEST S.O. **TYPICAL DATA**

 HP **100**

 AMPS **224/112**

 CODE LETTER **G**

 TEST DATE **---**

 TYPE **P**

 DUTY **CONT**

 ENCLOSURE **TEFC**

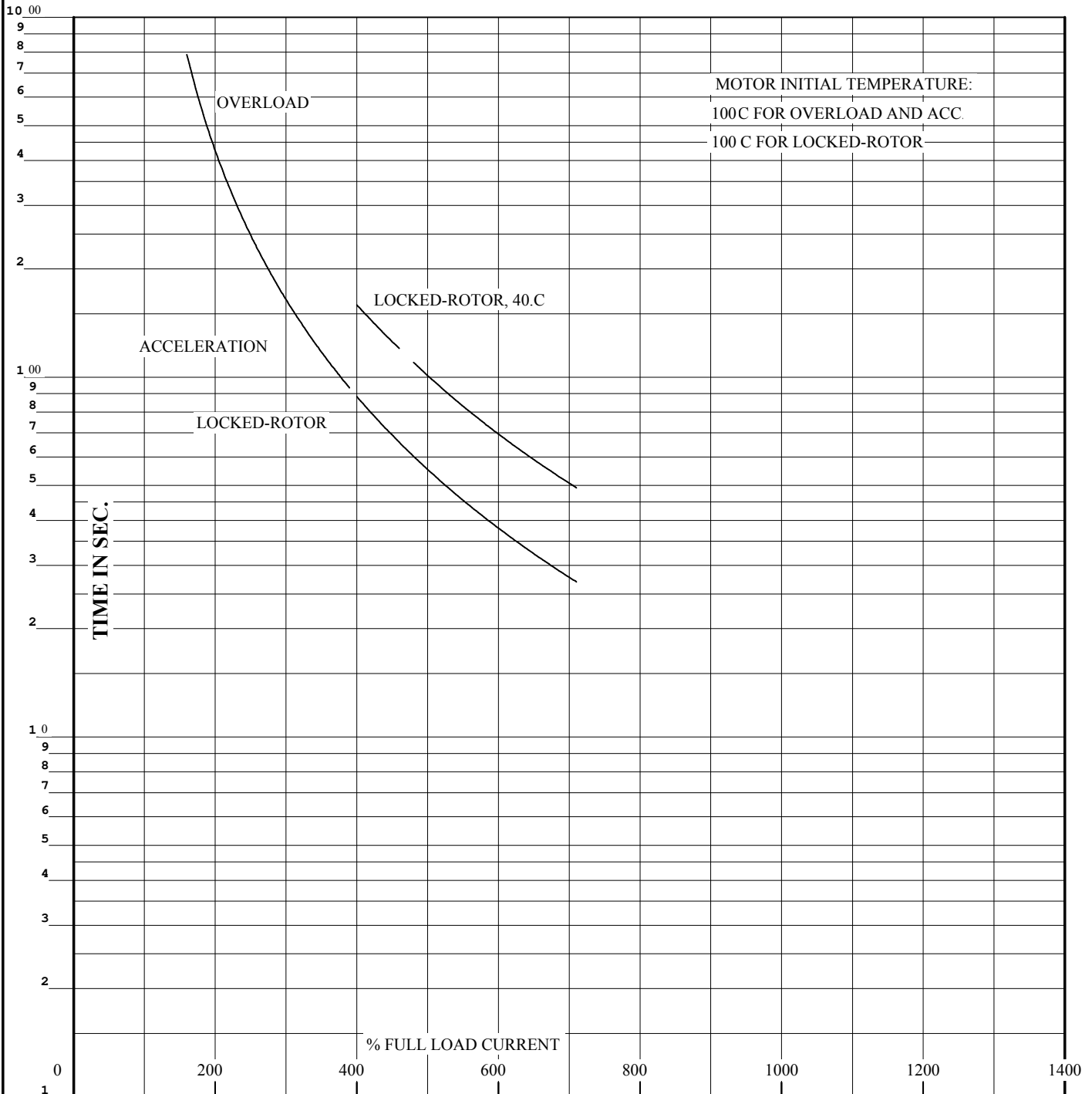
 STATOR RES. @ 25 °C **.0123/.0492**

 PHASE/HERTZ **3/60**

 AMB °C/INSUL **40/F**

 E/S **596956**

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS:

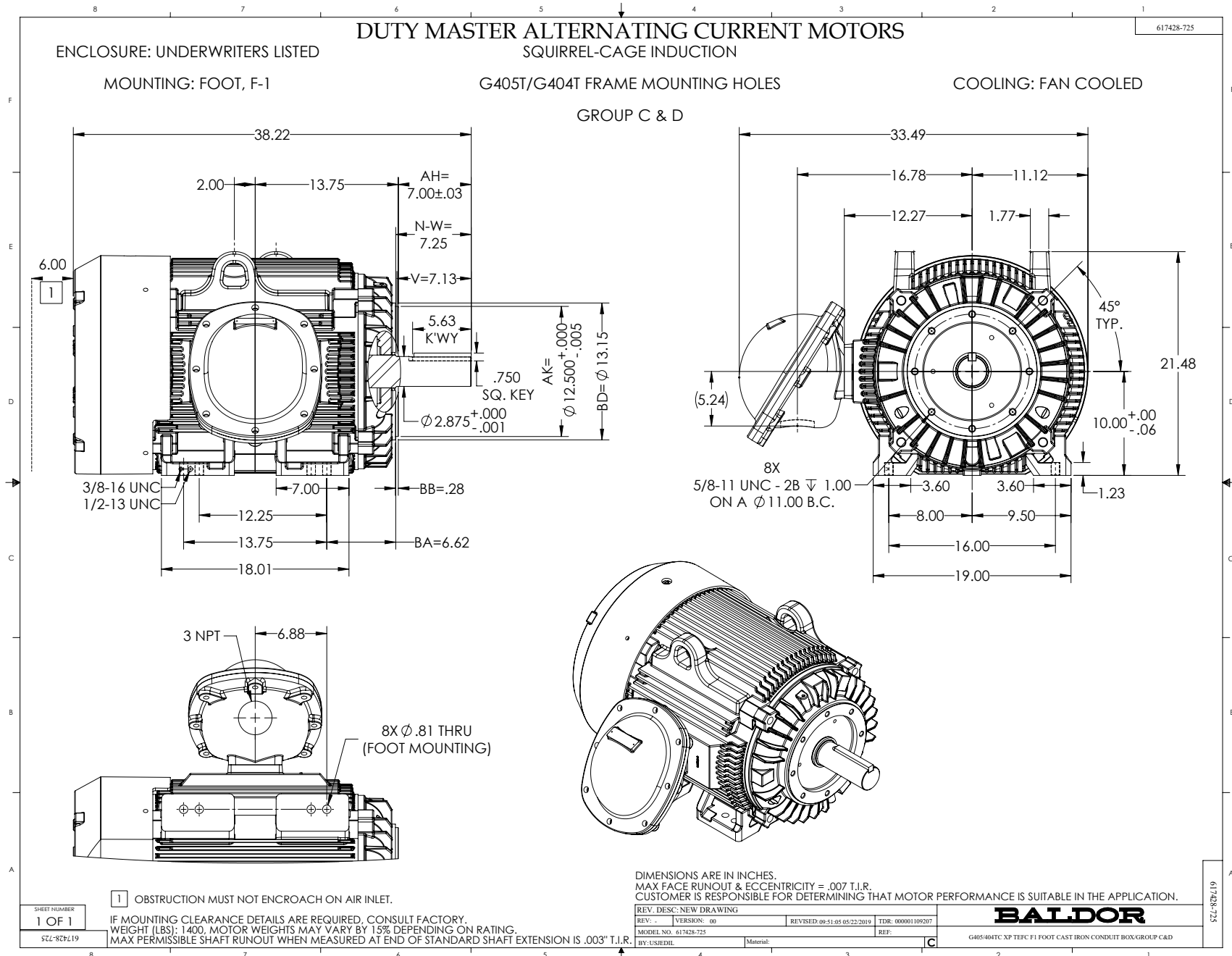
NEMA NOM. EFF. 95.4 PCT

 AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

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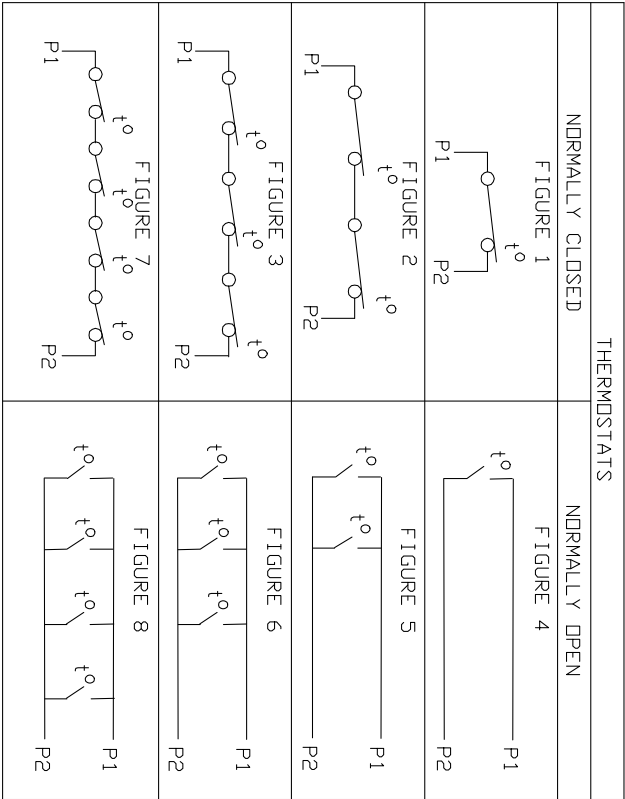
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 DATE 09/29/15
**A-C MOTOR
PERFORMANCE
CURVES**
A40WG0692-R016

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CONNECTION DIAGRAM
ACCESSORIES

MOTOR WINDING THERMOSTATS		
CONTACTS _____ @ _____ °C		
FIGURE NUMBER _____		
CONTACT RATING		
VOLTS	CONTINUOUS AMPERES	INRUSH AMPERES
110-120	3.0	30
220-240	1.5	15
440-480	0.75	7.5
550-600	0.60	6.0



CUSTOMER _____ CUSTOMER ORDER NO. _____ S.O. NO. _____

REV. DESC: LOADED TO BUS		
REV. LTR: A	VERSION: 01	TDR: 000000570390
FILE: \RAG\00013\849	REVISED: 10:16:21 12/07/2010	BY: RAGDRF
MTL: -		

BALDOR

A-C MOTOR CONNECTION ACCESSORIES

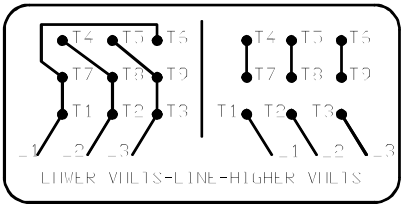
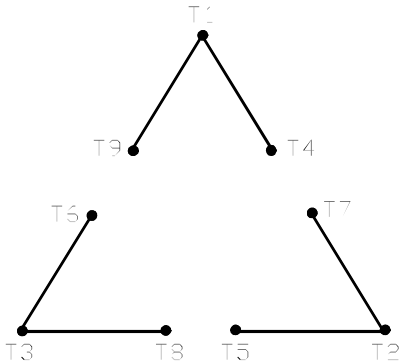
SH 1 of 1

418174-006

418174-006

416820-002

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 9 LEAD DELTA-CONNECTED



(N.P. 1575-B)

REV. DESC: FONT CHANGE FOR PDF SEARCHABLE		
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FILE: \MGA\00000\661	REVISED: 02:46:19 02/13/2020	BY: MGHMTT
MTL: —		

BALDOR - RELIANCE®

CONN DIAG — STANDARD 9 LEAD, DELTA-CONNECTED
SH 1 of 1

416820-002